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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
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10/539,809

06/20/2005

Jean Marie Bamclis

BAME3003/JEK

6808

23364 7590 05/02/2007

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ALEXANDRIA, VA 22314

EXAMINER

MUROMOTO JR, ROBERT H

ART UNIT

PAPER NUMBER

3765

MAIL DATE

DELIVERY MODE

05/02/2007

PAPER

**Please find below and/or attached an Office communication concerning this application or proceeding.**

The time period for reply, if any, is set in the attached communication.

## Office Action Summary

Application No.

10/539,809

Applicant(s)

BAMELIS ET AL.

Examiner

Robert H. Muromoto, Jr.

Art Unit

3765

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

### Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

### Status

- 1) ☒ Responsive to communication(s) filed on 20 June 2005.
- 2a) ☒ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

### Disposition of Claims

- 4) ☒ Claim(s) 1-25 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1-25 is/are rejected.
- 7) ☒ Claim(s) 7 is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

### Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

### Priority under 35 U.S.C. § 119

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some \* c) ☐ None of:
- 1) ☒ Certified copies of the priority documents have been received.
  - 2) ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  - 3) ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

### Attachment(s)

- |  |   |
|--|---|
| 1) <input type="checkbox"/> Notice of References Cited (PTO-892)   | 4) <input type="checkbox"/> Interview Summary (PTO-413)<br>Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948)                       | 5) <input type="checkbox"/> Notice of Informal Patent Application                       |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08)<br>Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____  |

## DETAILED ACTION

### *Priority*

Receipt is acknowledged of papers submitted under 35 U.S.C. 119(a)-(d), which papers have been placed of record in the file.

### ***Claim Rejections - 35 USC § 103***

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

Claims 1-25 are rejected under 35 U.S.C. 103(a) as being unpatentable over Grimm et al. US patent 4,962,796.

Grimm teaches, "An **air jet loom** is provided with a brake (i.e. clamp) for braking a weft yarn and a set of deflectors **at least one of which is movable in a controlled manner to impart tension in the weft yarn. The movement of the movable deflector can be controlled to reduce the amount of deflection during a braking operation to reduce stress peaks in the weft yarn. The movable deflector may be controlled by a spring, an electromagnet and/or a pneumatic reciprocating actuator** (abstract)."

The whole apparatus is considered to correspond to the "apparatus for stretching a weft thread..." as claimed.

In figure 8, deflector 23 and surface 33 correspond to recited "thread clamp". Upstream of which deflector 22 corresponds to "actuatable" device. There is inherently an adjustable, regulatable control means and **at least one motion detecting device** as Grimm states all deflectors (start, duration, and/or magnitude (force)) are preferably variably controlled at all times by measuring yarn speed (motion).

The assemblies cited above are clearly "next to each other" and on the same side of the shed as claimed.

Figures clearly show plural deflector devices as claimed.

Grimm states that the braking and damping means may be separately arranged and controlled or combined and controlled simultaneously as recited in claims 8-10.

Figures show the braking and damping means on the sley as recited.

Figure 1 and 2 clearly shows the sley having a reed with weft duct guide 9, and braking and dampening means disposed along an extension of the weft duct guide as claimed.

Figure 8 clearly shows the braking and dampening means outside the boundary of the weft transport duct as recited.

"Referring to FIG. 7 the braking and damping means 20c is in the form of a **pneumatic reciprocating actuator 29** for moving a top deflector 23 in the direction indicated by the arrow. **By way of a compressed air connection 30, the actuator 29 communicates with an appropriate compressed air supply (not shown).** **The use of a pneumatic reciprocating actuator 29 permits the different**

**parameters affecting the combined braking and damping element to be varied in a relatively simple manner. The adjustment can be made directly at the loom terminal by appropriate actuation by means of a solenoid valve similar to that of a relay nozzle valve 10** (col. 4, line56-69)."

"Increasing the pressure increases the speed of piston movement and simultaneously reduces damping. This may often not be desirable. First, accurate and rapid engagement is preferred and to assist variability should have a very short reaction time. Second, a reduced spring rate is desirable.

**Both requirements can be satisfied if the deflection and damping functions are separated** (col. 5, lines 1-10)."

Limitations of Claims 14, 15, 19 and 20 are clearly disclosed in citation above. The limitations of claims 16 and 17 are inherent as Grimm has already stated that the duration and magnitude of the braking and dampening means are continuously controlled and variably regulated to control the effects of these devices.

With respect to claim 18, Grimm states that the adjustment to the pneumatic system can be made by means of a solenoid valve. Also though not shown, Grimm states all deflectors could be separately arranged pneumatically and this would require at least two delivery lines as recited.

Method claims 21-23 are also clearly disclosed by citations above.

The limitations of claim 4 are considered inherent to Grimm. The weft storage drum 5 of any weaving device performs the so-called "measuring" of appropriate

number of windings to ensure proper weft yarn length. That was the objective that led to the use of weft storage drums in weaving machines of all types.

With regard to the yarn clamp at opposite side of insertion as recited in claims 1, 21, and 25 Grimm teaches a catching means that would correspond to said yarn clamp on opposite side from the insertion side. The yarn is inherently held until beat-up as in all weaving operations.

Grimm does teach the whole system as stated above to be located on the side opposite of the weft insertion side.

Grimm does however teach a yarn clamp at the opposite side for holding the weft yarn during the weaving process until beat up occurs as in all weaving machines. Since Grimm teaches an arrangement for holding weft yarns and precisely tensioning the weft yarn on the insertion side of the loom, it would have been an obvious variation to the invention of Grimm to position the weft yarn holding/deflecting/tensioning system as taught above on the weft exit side and the simple yarn clamp on the insert side rather than the weft entry side to provide precision holding or stretching of the weft yarn during the weaving process prior to beat up.

### ***Response to Arguments***

Applicant's arguments with respect to claims 1-25 have been considered but are moot in view of the new ground(s) of rejection.

### ***Conclusion***

Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP

§ 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the date of this final action.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Robert H. Muromoto, Jr. whose telephone number is 571-272-4991. The examiner can normally be reached on 8-530, M-F.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Gary Welch can be reached on 571-272-4996. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

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Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

Bobby Muromoto  
Patent examiner  
April 23, 2007



GARY L. WELCH  
SUPERVISORY PATENT EXAMINER  
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